



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,688	01/09/2001	Richard L. Fisher	Fisher-001221	4670

7590 12/22/2004

Albert W. Watkins
Quill & Disc Incorporated
30844 NE 1st Avenue
St. Joseph, MN 56374

EXAMINER

AVILA, STEPHEN P

ART UNIT	PAPER NUMBER
----------	--------------

3617

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/756,688	FISHER, RICHARD L.	
	Examiner	Art Unit	
	Stephen Avila	3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-31 and 38-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-23, 25, 26, 28, 29, 31, 38 and 40-72 is/are rejected.
- 7) ☒ Claim(s) 24, 27, 30, 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3617

1. In view of the Appeal filed on March 26, 2004, PROSECUTION IS HEREBY REOPENED. A new ground of rejection of claims 21-23, 25, 26, 28, 29, and 31 is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Art Unit: 3617

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 21-23, 25, 26, 28, 29, 31, 40-52, and 63-71 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lovell. Lovell discloses a drive assembly with an elongate drive tube 22, configured for rotatably receiving a drive shaft 16 therethrough, a drive assembly housing 24 having a lower end, a bearing 40 in rotational communication between the drive assembly housing and the drive shaft, a Seal 75 configured to restrict contaminants from entering the drive assembly housing, and a seal cap 62 with threads (at 64; note Figure 4, for example). Additionally, with respect to "for a drive marine mud motor", it is noted that this is intended use and intended use does not define patentable structure. Furthermore, the device of Lovell is capable of being used in a mud environment and thus is a mud motor.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 53-62 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lovell in view of Hulsebus et al (cited by Applicant). Lovell does not disclose ball bearings. Hulsebus et al teach anti-friction ball bearings 15, 34 to increase the durability and life of the parts to avoid fracture (note column 1, lines 12-17). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the sleeve bearing of Lovell to be in form of ball bearings for increased

Art Unit: 3617

durability and life of the parts to avoid fracture and for reduced friction as taught by Hulsebus et al.

6. Claim 38 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Foreman (6,361,388). Foreman discloses a drive assembly for a marine motor with an elongate tube 16, a drive shaft 27, a housing 42, a bearing 40, and seals 32, 34 with the inside of the drive assembly housing is coupled to the outside of the elongate drive tube.

7. Claims 24, 27, 30 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Applicant's arguments filed March 26, 2004 have been fully considered but they are not persuasive. With respect to the rejection of 35, USC 102(e) based upon the Foreman reference, the evidence filed by Applicant including a newspaper article and affidavits do not specifically detail the inside of the drive assembly housing coupled to the outside of the elongate drive tube.

Applicant alleges that Lovell does not disclose a bearing. However, Lovell clearly discloses a bearing, note in particular, column 4, line 47, "inner bearing housing 30", column 4, line 48, "bearing insert 40", column 6, line 17, "bearing 40", column 6, line 22, "bearing 40 in the bearing assembly 10".

Applicant further alleges that Lovell does not disclose an elongate shaft and removable bearing housing. However, Lovell clearly discloses an elongate shaft 16 and

Art Unit: 3617

a removable bearing housing 30 (note column 6, lines 1-20, which detail the removal of the bearing housing in order to replace the bearings).

Applicant further alleges that the device of Lovell is unsuitable for application with mud motors. However, it is not seen where the Lovell patent sets forth specifically that it is unsuitable for mud motors. Note that the Lovell patent could operate in muddy water and is capable of being used as a mud motor.

Applicant further alleges that the bearings of Lovell are not removable. However, as stated above column 6, lines 1-20 clearly disclose the bearings are replaceable via a removable housing 30. Additionally, housing 24 is clearly removable via threaded connection to tube 22. (note Figure 4, for example).

Applicant does not directly argue the combination of the ball bearings of Hulsebus et al with Lovell, as set forth in paragraph 5 above, so that combination is deemed to be proper.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Avila whose telephone number is 703-308-2578. The examiner can normally be reached on Monday to Thursday from 8 AM to 4 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen Avila
Primary Examiner
Art Unit 3617

Avila
12/16/04

[Signature]
Director
TC 3600